TABLE I

Solvay Trona Plant Pollutant Emission Rates ppn

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Source Number	Equipment Description		Pollutants PM_{10}	SO_2	NO_x	VOC
53	Product Silo Reclaim Baghouse #2	{RMV}	-1.10	n.a.	n.a.	0.00
53	Product Silo Reclaim Baghouse #2	{ADD}	0.45	n.a.	n.a.	0.00
64	Sulfite Blending #2 Baghouse	{RMV}	-0.15	n.a.	n.a.	0.00
64	Sulfite Blending #2 Baghouse	{ADD}	0.08	n.a.	n.a.	0.00
65	Sulfite Blending #1 Baghouse	{RMV}	-0.06	n.a.	n.a.	0.00
65	Sulfite Blending #1 Baghouse	{ADD}	0.03	n.a.	n.a.	0.00
73	MBS Product Dryer	{RMV}	-1.20	-0.77	-0.15	0.00
73	MBS Product Dryer	{ADD}	0.90	0.77	0.15	0.00
	Subtotal, Current Proposed Plant Modifications (pph)		**-40.83**	**0.00**	**15.25**	**221.16**
	Annual Emission Totals (TPY)		**-181.1 α**	**0.0**	**66.8**	**968.7**
	Bagging Facility/MBS Plant Modifications					
40	Sulfite Product Bagging Baghouse	{RMV}	-0.30	n.a.	n.a.	0.00
68	Trona Silo/Bagging Machine Baghouse	{RMV}	-0.41	n.a.	n.a.	0.00
68	Trona Silo/Bagging Machine Baghouse	{ADD}	0.36	n.a.	n.a.	0.00
69	Soda Ash Silo/Bagging Machine Baghouse	{RMV}	-0.41	n.a.	n.a.	0.00
70	Sulfite Silo/Bagging Machine Baghouse	{RMV}	-0.41	n.a.	n.a.	0.00
70	Sulfite Silo/Bagging Machine Baghouse	{ADD}	0.27	n.a.	n.a.	0.00
71	MBS Silo/Bagging Machine Baghouse	{RMV}	-0.41	n.a.	n.a.	0.00
71	MBS Silo/Bagging Machine Baghouse	{ADD}	0.27	n.a.	n.a.	0.00
72	MBS Soda Ash Feed Bin Vent Filter	{RMV}	-0.14	n.a.	n.a.	0.00
72	MBS Soda Ash Feed Bin Vent Filter	{ADD}	0.07	n.a.	n.a.	0.00
	Subtotal, Bagging Facility/MBS Plant Modifications (pph)		**-1.11**	**0.00**	**0.00**	**0.00**
	Annual Emission Totals (TPY)		**-4.9**	**0.0**	**0.0**	**0.0**
	"D" Process Line Expansion					
76 ✓	"D" Train Primary Ore Screening Baghouse		2.45	n.a.	n.a.	0.00
79 ✓	Ore Transfer Point Baghouse		0.84	n.a.	n.a.	0.00
80 ✓	"D" Ore Calciner Precipitator		12.25	n.a.	20.00	533.50
81 ✓	"D" Train Dryer Area Baghouse		0.50	n.a.	n.a.	0.00
82 ✓	DR-6 Product Dryer Precipitator		3.45	n.a.	30.00	0.27
83 ✓	Product Silo Top Baghouse #3		0.41	n.a.	n.a.	0.00
85	#3 Gas Boiler		0.48	n.a.	3.80	0.27
	Subtotal, "D" Process Line Expansion (pph)		**20.38**	**0.00**	**53.80**	**534.04**
	Annual Emission Totals (TPY)		**89.3**	**0.0**	**235.6**	**2339.1**
	GRAND TOTAL SOLVAY PLANT REVISED EMISSIONS					
	Grand Total, Solvay Plant Emissions (pph)		**86.37**	**141.17**	**309.90**	**1814.40**
	Annual Emission Totals (TPY)		**384.8 α**	**618.3**	**2671.4**	**7947.1**

****** **Footnotes** ******

α ➔ Sources will operate on a schedule of 12 hours/day, therefore annual emissions are based on one half of a year, or 4380 hours operation.

β ➔ Source #2a industrial ventillation system will be modified to include dust collection from pick up points from the existing source #47 cusher baghouse, while #47 is eliminated from the plant inventory. The #2a fan will not be changed, however, and that fan's exhaust air volume will simply be re-apportioned throughout the modified collection ductwork. With the same projected exhaust volume, the existing source #2a particulate emission rate will remain at 1.60 pph.

Table II
Solvay Minerals
VOC / HAP's INVENTORY (lb/hr by source)

		Process Source Identification Numbers																																					
		Calciners			Soda Ash/Alkaten Dryers					Sulfite Dryers		Mine Vent & Miscellaneous Sources							Boilers			Housekeeping Baghouse Indentification Numbers																	
		AQD #17 Calciner	AQD #48 Calciner	AQD #60 Calciner	AQD #15 SA Dryer	AQD #26 Tr Dryer	AQD #28 FB Dryer	AQD #51 SA Dryer	AQD #82 SA Dryer	AQD #35 Sf Dryer	AQD #73 Ms Dryer	Mine Vent	AQD #20 Gas Tank	AQD #32 Cs Evap	AQD #33 Sulfr Bmr	AQD #42 HCl Tank	AQD #43 Slfr Tank	AQD #18 Boiler	AQD #19 Boiler	AQD #85 Boiler	AQD #2a Dst Clctr	AQD #6a Dst Clctr	AQD #6b Dst Clctr	AQD #7 Dst Clctr	AQD #10 Dst Clctr	AQD #11 Dst Clctr	AQD #14 Dst Clctr	AQD #16 Dst Clctr	AQD #24 Dst Clctr	AQD #25 Dst Clctr	AQD #27 Dst Clctr	AQD #30 Dst Clctr	AQD #31 Dst Clctr
l Volatile Organic Compounds * ==>		776.00	388.00	533.50	0.06	0.01	Insignif	0.28	0.27	Insignif	Insignif	115.00	0.02	Insignif	Insignif	Insignif	Insignif	0.50	0.50	0.27	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
AP's (Method 0030)	CAS Number																																						
Benzene	000071-43-2	25.0600	10.6100	17.2300	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.2900	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
1,3 Butadiene	000106-99-0	51.8900	30.9400	35.6800	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Ethylbenzene	000100-41-4	6.1500	1.7300	4.2300	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
2-Butanone	000078-93-3	19.6200	2.6600	13.4900	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.7700	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Hexane	000110-54-3	14.7100	6.9000	10.1100	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.4300	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Styrene	000100-42-5	5.9600	4.1800	4.1000	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0800	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Toluene	000108-88-3	13.2900	3.4000	9.1400	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	2.5100	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Xylene	001330-20-7	22.6000	7.7800	15.5400	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	8.6700	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
1,1,1 Trichloroethane	00071-55-6	11.4300	4.0300	7.8600	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
** Acrilonitrile	000107-13-1	5.4500	1.5200	3.7500	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Methylene Chloride	000075-09-2	1.2600	1.8900	0.8700	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Trichloroethylene	000079-01-6	38.2800	3.7900	26.3200	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Subtotal VOC HAP's ==>		215.7000	79.4300	148.3200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	12.7500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
AP's (Method 0010)	CAS Number																																						
Acetophenone	000098-86-2	0.0160	0.0080	0.1100	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Biphenyl	000092-52-4	0.0228	0.0114	0.0157	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
(2-Ethylhexyl)phthalate	000117-81-7	0.0015	0.0008	0.0011	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Chloroacetophenone	000532-27-4	0.0014	0.0007	0.0010	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
m-, o-, p- Cresols	000108-39-4	0.0093	0.0047	0.0064	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Cumene	000098-82-8	0.0018	0.0009	0.0012	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Dibenzofuran	000132-64-9	0.0191	0.0095	0.0131	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Di-n-butylphthalate	000084-74-2	0.0115	0.0058	0.0079	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
N,N-dimethylaniline	000121-69-7	0.0076	0.0038	0.0052	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Naphthalene	000091-20-3	0.1477	0.0739	0.1015	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Phenol	000108-95-2	0.0907	0.0453	0.0623	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Subtotal SVOC HAP's ==>		0.3294	0.1648	0.3255	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
AP's (Method 0011)	CAS Number																																						
Formaldehyde	000050-00-0	0.3800	0.1200	0.2600	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Acetaldehyde	000075-07-0	1.1900	0.2400	0.8200	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Propionaldehyde	000123-38-6	0.4200	0.0700	0.2900	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Acrolein	000107-02-8	1.7400	0.3100	1.2000	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif
Subtotal Aldehyde & Ketone HAP's ==>		3.7300	0.7400	2.5700	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Title III HAP's ==>		219.7594	80.3348	151.2155	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	12.7500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

on methane/non ethane hydrocarbons - Methods 18 & 25A

hese four compounds may have been misidentified during the GC stack tests. The more accurate GC/MS did not identify these compounds.

nif = emission rate considered insignificant per testing or process knowledge

SOLVAY2016_1.4_001442

Table II
SOLVAY MINERALS
VOC / HAP's INVENTORY (lb/hr by source)
Page 2 of 2

ousekeeping Baghouse Indentification Numbers

AQD #36 Dst Clctr	AQD #37 Dst Clctr	AQD #38 Dst Clctr	AQD #39 Dst Clctr	AQD #40 Dst Clctr	AQD #41 Dst Clctr	AQD #44 Dst Clctr	AQD #45 Dst Clctr	AQD #46 Dst Clctr	AQD #50 Dst Clctr	AQD #52 Dst Clctr	AQD #53 Dst Clctr	AQD #54 Dst Clctr	AQD #55 Dst Clctr	AQD #62 Dst Clctr	AQD #63 Dst Clctr	AQD #64 Dst Clctr	AQD #65 Dst Clctr	AQD #66 Dst Clctr	AQD #67 Dst Clctr	AQD #68 Dst Clctr	AQD #70 Dst Clctr	AQD #71 Dst Clctr	AQD #72 Dst Clctr	AQD #74 Dst Clctr	AQD #75 Dst Clctr	AQD #76 Dst Clctr	AQD #77 Dst Clctr	AQD #78 Dst Clctr	AQD #79 Dst Clctr	AQD #81 Dst Clctr	AQD #83 Dst Clctr	AQD #84 Dst Clctr	Plant Total	
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	1814.41	<== Total VOC's *
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif		HAP's (Method 0030)
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	53.1900	Benzene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	118.5100	1,3 Butadiene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	12.1100	Ethylbenzene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	36.5400	2-Butanone
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	32.1500	Hexane
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	14.3200	Styrene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	28.3400	Toluene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	54.5900	Xylene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	23.3200	** 1,1,1 Trichloroethane
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	10.7200	** Acrilonitrile
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0200	** Methylene Chloride
																																	68.3900	** Trichloroethylene
																																	456.2000	<== Subtotal VOC HAP's
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif		HAP's (Method 0010)
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.1340	Acetophenone
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0499	Biphen
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0034	bis(2-Ethylhexyl)phthalate
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0031	2-Chloroacetophenone
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0204	m, o, p- Cresols
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0039	Cumene
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0417	Dibenzofuran
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0262	Di n butylphthalate
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.0166	N,N dimethylaniline
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3232	Naphthalene
																																	0.1983	Phenol
																																	0.8197	<== Subtotal BVOC HAP's
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif		HAP's (Method 0011)
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	0.7000	Formaldehyde
Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	Insignif	2.2500	Acetaldehyde
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7600	Propionaldehyde
																																	3.2600	Acrolein
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.0400	<== Subtotal A & K HAP's
																																	464.0597	<== Total Title III HAP's

* Non methane/non ethane hydrocarbons - Methods 18 & 25A

** These four compounds may have been misidentified during the GC stack tests. The more accurate GC/MS did not identify these compounds.

Insignif = emission rate considered insignificant per testing or process knowledge

TABLE 1
Solvay Trona Plant Pollutant Emission Rates pph
(Page 2 of 3)

Source Number	Equipment Description		PM_{10}	SO_2	NO_x	VOC
65	Sulfite Blending #1 Baghouse		0.06	n.a.	n.a.	0.00
66	Carbon/Perlite Additive Scrubber		0.58	n.a.	n.a.	0.00
67	Bottom Ash Baghouse		0.47	n.a.	n.a.	0.00
68	Trona Silo/Bagging Machine Baghouse		0.41	n.a.	n.a.	0.00
69	Soda Ash Silo/Bagging Machine Baghouse		0.41	n.a.	n.a.	0.00
70	Sulfite Silo/Bagging Machine Baghouse		0.41	n.a.	n.a.	0.00
71	MBS Silo/Bagging Machine Baghouse		0.41	n.a.	n.a.	0.00
72	MBS Soda Ash Feed Bin Vent Filter		0.14	n.a.	n.a.	0.00
73	MBS Product Dryer		1.20	0.77	0.15	0.00
MV	Mine Vent		n.a.	n.a.	n.a.	115.00
	Subtotal, Current Plant Emissions **(pph)**		**109.93**	**141.17**	**540.85**	**1059.20**
	Annual Emission Totals (TPY)		**481.5**	**618.3**	**2368.9**	**4639.3**
	Current Proposed Plant Modifications					
2a	Ore Crusher Building Baghouse #1	{RMV}	-1.60	n.a.	n.a.	0.00
2a	Ore Crusher Building Baghouse #1	{ADD}	1.60 β	n.a.	n.a.	0.00
2b	Ore Reclaim Baghouse #1	{RMV}	-0.20	n.a.	n.a.	0.00
6b	Product Silo Reclaim Baghouse #1	{RMV}	-1.40	n.a.	n.a.	0.00
6b	Product Silo Reclaim Baghouse #1	{ADD}	0.51	n.a.	n.a.	0.00
10	Coal Crushing & Storage Baghouse	{RMV}	-0.60	n.a.	n.a.	0.00
10	Coal Crushing & Storage Baghouse	{ADD}	0.26 α	n.a.	n.a.	0.00
11	Coal Transfer Station Baghouse	{RMV}	-0.60	n.a.	n.a.	0.00
11	Coal Transfer Station Baghouse	{ADD}	0.21 α	n.a.	n.a.	0.00
14	Boiler Coal Bunker Baghouse	{RMV}	-1.00	n.a.	n.a.	0.00
14	Boiler Coal Bunker Baghouse	{ADD}	0.37 α	n.a.	n.a.	0.00
15	DR-1 & 2 Product Dryers Scrubber	{RMV}	-6.80	n.a.	-1.20	-0.06
15	DR-1 & 2 Product Dryers Scrubber	{ADD}	4.34	n.a.	1.20	0.06
17	"A" & "B" Gas Fired Ore Calciners	{RMV}	-22.30	0.00	-20.00	-628.56
17	"A" & "B" Gas Fired Ore Calciners	{ADD}	22.30	0.00	30.00	776.00
18	#1 Coal Boiler Scrubber & Prcptr	{RMV}	-17.00	-70.00	-245.00	-0.50
18	#1 Coal Boiler Scrubber & Prcptr	{ADD}	5.00	70.00	245.00	0.50
19	#2 Coal Boiler Scrubber & Prcptr	{RMV}	-17.00	-70.00	-245.00	-0.50
19	#2 Coal Boiler Scrubber & Prcptr	{ADD}	5.00	70.00	245.00	0.50
26	DR-3 Alkaten Product Dryer Baghouse	{RMV}	-1.10	n.a.	n.a.	0.00
26	DR-3 Alkaten Product Dryer Baghouse	{ADD}	0.55	n.a.	0.25	0.01
41	Sulfite Product Loadout Baghouse	{RMV}	-0.40	n.a.	n.a.	0.00
41	Sulfite Product Loadout Baghouse	{ADD}	0.19	n.a.	n.a.	0.00
44	Caustic Lime Delivery Baghouse	{RMV}	-0.90	n.a.	n.a.	0.00
44	Caustic Lime Delivery Baghouse	{ADD}	0.18 α	n.a.	n.a.	0.00
46	#2 Ore Transfer Baghouse	{RMV}	-1.20	n.a.	n.a.	0.00
46	#2 Ore Transfer Baghouse	{ADD}	0.71	n.a.	n.a.	0.00
47	"C" Train Ore Crusher Baghouse	{RMV}	-5.10	n.a.	n.a.	0.00
48	"C" Ore Calciner Precipitator	{RMV}	-9.30	n.a.	-10.00	-314.28
48	"C" Ore Calciner Precipitator	{ADD}	9.30	n.a.	15.00	388.00
50	"C" Train Dryer Area Baghouse	{RMV}	-2.10	n.a.	n.a.	0.00
50	"C" Train Dryer Area Baghouse	{ADD}	0.70	n.a.	n.a.	0.00
51	DR-5 Product Dryer Precipitator	{RMV}	-4.80	n.a.	-18.00	-0.28
51	DR-5 Product Dryer Precipitator	{ADD}	2.40	n.a.	18.00	0.28

(Page 1/3)

Source Number	Equipment Description	Pollutants			
		PM_{10}	SO_2	NO_x	VOC
	Current Plant Emission Sources				
2a	Ore Crusher Building Baghouse #1	1.60	n.a.	n.a.	0.00
2b	Ore Reclaim Baghouse #1	0.20	n.a.	n.a.	0.00
6a	Product Silo Top Baghouse #1	0.30	n.a.	n.a.	0.00
6b	Product Silo Reclaim Baghouse #1	1.40	n.a.	n.a.	0.00
7	Product Loadout Baghouse #1	1.20	n.a.	n.a.	0.00
10	Coal Crushing & Storage Baghouse	0.60	n.a.	n.a.	0.00
11	Coal Transfer Station Baghouse	0.60	n.a.	n.a.	0.00
14	Boiler Coal Bunker Baghouse	1.00	n.a.	n.a.	0.00
15	DR-1 & 2 Product Dryers Scrubber	6.80	n.a.	1.20	0.06
16	Dryer Area Housekeeping Baghouse	0.90	n.a.	n.a.	0.00
17	"A" & "B" Gas Fired Ore Calciners	22.30	0.00	20.00	628.56
18	#1 Coal Boiler Scrubber & Prcptr	17.00	70.00	245.00	0.50
19	#2 Coal Boiler Scrubber & Prcptr	17.00	70.00	245.00	0.50
20	Gas & Diesel Storage Tanks	n.a.	n.a.	n.a.	0.02
24	Boiler Flyash Silo Vent Baghouse	0.30	n.a.	n.a.	0.00
25	Alkaten Crushing Area Baghouse	1.00	n.a.	n.a.	0.00
26	DR-3 Alkaten Product Dryer Baghouse	1.10	n.a.	n.a.	0.00
27	Alkaten Product Bagging Baghouse	0.50	n.a.	n.a.	0.00
28	DR-4 Fld Bed Product Dryer Scrubber	2.90	n.a.	n.a.	0.00
30	Caustic #1 Lime Bin Baghouse	0.20	n.a.	n.a.	0.00
31	Caustic #2 Lime Bin Baghouse	0.20	n.a.	n.a.	0.00
32	Caustic Evaporator Brmtrc Condenser	0.00	n.a.	n.a.	0.00
33	Sulfite Sulfur Burner Scrubber	n.a.	0.40	1.50	0.00
34	Sulfite Crystallizer	0.00	n.a.	n.a.	0.00
35	Sulfite Product Dryer Scrubber	1.40	n.a.	n.a.	0.00
36	Sulfite #1 Product Bin Baghouse	0.10	n.a.	n.a.	0.00
37	Sulfite #2 Product Bin Baghouse	0.10	n.a.	n.a.	0.00
38	Sulfite #3 Product Bin Baghouse	0.10	n.a.	n.a.	0.00
39	Sulfite #4 Product Bin Baghouse	0.10	n.a.	n.a.	0.00
40	Sulfite Product Bagging Baghouse	0.30	n.a.	n.a.	0.00
41	Sulfite Product Loadout Baghouse	0.40	n.a.	n.a.	0.00
42	Sulfite HCl Tank Vent	n.a.	n.a.	n.a.	0.00
43	Sulfite Sulfur Tank Storage Vent	n.a.	n.a.	n.a.	0.00
44	Caustic Lime Delivery Baghouse	0.90	n.a.	n.a.	0.00
45	Alkaten Transloading Baghouse	0.20	n.a.	n.a.	0.00
46	#2 Ore Transfer Baghouse	1.20	n.a.	n.a.	0.00
47	"C" Train Ore Crusher Baghouse	5.10	n.a.	n.a.	0.00
48	"C" Ore Calciner Precipitator	9.30	n.a.	10.00	314.28
50	"C" Train Dryer Area Baghouse	2.10	n.a.	n.a.	0.00
51	DR-5 Product Dryer Precipitator	4.80	n.a.	18.00	0.28
52	Product Silo Top Baghouse #2	0.50	n.a.	n.a.	0.00
53	Product Silo Reclaim Baghouse #2	1.10	n.a.	n.a.	0.00
54	T-200 Product Storage Baghouse	0.19	n.a.	n.a.	0.00
55	Recycle/Reclaim Baghouse	0.40	n.a.	n.a.	0.00
62	Activated Carbon Bin Vent	0.13	n.a.	n.a.	0.00
63	Perlite Bin Vent Baghouse	0.17	n.a.	n.a.	0.00
64	Sulfite Blending #2 Baghouse	0.15	n.a.	n.a.	0.00